



DEPARTMENT OF THE ARMY
UNITED STATES ARMY TANK - AUTOMOTIVE AND ARMAMENTS COMMAND
1 ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-7630

REPLY TO
ATTENTION OF

29 SEP 2003

Team D - TACOM Light Combat Contracting Group

PEI Electronics Inc.
110 Wynn Drive
Huntsville AL 35807

Gentlemen:

The United States of America acting through the Contracting Officer, hereby accepts your bid specified in your offer P3-7090/3CM16 submitted 11 September 2003. Your offer set forth a total estimated Cost Plus Fixed Fee (CPFF) of \$1,302,521.00 for Embedded Diagnostics prototype development, hardware and Integrated Electronic Technical Manuals for the USMC Assault Breacher Vehicle as identified in the Statement Of Work and Subcontracting Plan included as Attachment 001 of this document. Delivery order DAAE20-03-G-0001 Delivery Order 0007 has been assigned to the above requirement with a total delivery order price of \$1,302,521.00. A delivery order in the usual format, dated and numbered as set forth above, incorporating all the terms and conditions of a CPFF award under Basic Ordering Agreement (BOA) DAAE20-03-G-0001 hereby created, is being prepared and will be forwarded to you in the near future.

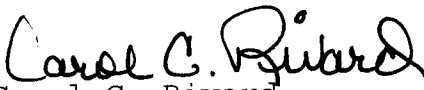
Certified funds for the above requirement are obligated as follows:

PRON:	W13MDP25M1M1
NSN:	N/A
PART NUMBER:	N/A
NOUN:	ED SUPPORT FOR USMC ABV
SUPPL ADDRESS:	To Be Determined
AMS CD:	00000000000
ACCT CLASS:	97X4930 AAPH 6D 252G L124Y1 52B00 S01002
FOB:	SOURCE
QUANTITY:	N/A
PERF COMPLETE:	2004 OCTOBER 01

You are directed to proceed with the performance of the delivery order as authorized by this office. However you are enjoined from shipping any completed work product until you have received the formal delivery order.

The point of contact is Mr. Rock Woodstock, AMSTA-LC-CAC-D,
(309) 782-7237, E-MAIL: woodstockr@ria.army.mil

Sincerely,


Carol C. Rivard
Contracting Officer

Copy Furnished:

Cdr, DCMA Huntsville
Bldg 4505 Suite 301
Martin Road
Redstone Arsenal AL 35898-0001

STATEMENT OF WORK (SOW)

**Embedded Diagnostics (ED)
and
Interactive Electronic Technical Manuals (IETM)
for the
United States Marine Corps
Assault Breacher Vehicle (ABV) Program**

August 6, 2003

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STATEMENT OF WORK

Embedded Diagnostics and Interactive Electronic Technical Manuals for the Assault Breacher Vehicle (ABV)

1 OBJECTIVE

This Statement of Work (SOW) sets forth the work efforts required for the successful execution of Embedded Diagnostics (ED) and Interactive Electronic Technical Manuals (IETM) for the United States Marine Corps' Assault Breacher Vehicle (ABV) program.

The contractor shall be responsible for providing all material, services and necessary support documentation, excluding required GFE/GFI, needed to complete the tasks identified in this SOW.

1.1 Scope

The contractor shall perform all the tasks required and delineated in the following paragraphs. The period of performance for this effort shall be from *TBD*.

1.2 Acronyms

ABV	-	Assault Breacher Vehicle
BIT	-	Built-in Test
CDRL	-	Contract Data Requirements List
CM	-	Configuration Management
ED	-	Embedded Diagnostics
ETM	-	Electronic Technical Manual
FIT	-	Fault Isolation Tree
FMEA	-	Failure Mode and Effects Analysis
FOC	-	Full Operational Capability
FRACAS	-	Failure Reporting, Analysis and Corrective Action System
FWMP	-	Full Width Mine Plow
GFE	-	Government Furnished Equipment
GFI	-	Government Furnished Information
I&KP	-	Instructor and Key Personnel
IAW	-	In Accordance With
ICD	-	Interface Control Drawing
IETM	-	Interactive Electronic Technical Manual
ILS	-	Integrated Logistics Support
ILSP	-	Integrated Logistics Support Plan
IOT&E	-	Initial Operational Test and Evaluation
IPR	-	Integrated Program Review
LCN	-	Logistics Control Number
LMI	-	Logistics Management Information
LMS	-	Lane Marking System
LORA	-	Level of Repair Analysis
LRU	-	Line Replaceable Unit
LUT	-	Limited User Test
MICLIC	-	Mine Clearing Line Charge
MPT	-	Manpower and Training
NET	-	New Equipment Training
ORD	-	Operational Requirements Document
POI	-	Plan of Instruction
PRP	-	Production Representative Prototype
RAM	-	Reliability, Availability and Maintainability
RORS	-	Rapid Ordnance Removal System
RPSTL	-	Repair Parts and Special Tools List
SMP	-	Surface Mine Plow
SMR	-	Source Maintenance Recoverability

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SOW	-	Statement of Work
SRU	-	Shop Replaceable Unit
TBD	-	To Be Determined
TDP	-	Technical Data Package
TM	-	Technical Manual
TMDE	-	Test Measurement and Diagnostic Equipment
ULSS	-	User's Logistics Support Summary
USMC	-	United States Marine Corps
WBS	-	Work Breakdown Structure

2 APPLICABLE DOCUMENTS

- Operational Requirements Document (ORD) for Assault Breacher Vehicle (ABV) ACAT III
- *TBD*

3 PROGRAM REQUIREMENTS

3.1 Program Management and Administration

The contractor shall establish a program management organization to manage and monitor the technical, schedule and cost performance, and to identify and respond to program issues and coordinate all required reviews.

3.1.1 Program Progress Reporting

The contractor shall provide a monthly status report, in contractor's format, that:

- Summarizes work performed and related travel
- Provides the status of deliverables
- Identifies key issues that could potentially impact contract performance
- Describes planned activities for the next reporting period.

Also included in this report shall be a summary of spending at the Level 2 work breakdown structure (WBS) that reflects expenditures in labor hours – actual versus planned, cumulative to date, percent of budget spent and variance. Submittal shall be per CDRL A001.

3.1.2 Planning and Scheduling System

The contractor shall develop a schedule that accurately portrays the sequence and relationship of summary level activities defining the contractor's program. These activities shall be definitive to the appropriate level for clarity and shall reflect the tasks identified in the WBS. The Summary Level Schedule shall be provided to the ANAD Program Office seven (7) days after contract award and shall be updated as required. Submittal shall be per CDRL A002.

3.1.3 Integrated Program Review (IPR) Support

The contractor shall provide appropriate briefing materials and program support for ABV Program IPRs. The program IPRs will be held on a quarterly basis at Quantico through Full Operational Capability (FOC). Periodic informal reviews, i.e., monthly may be in the format of video and/or teleconference.

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3.2 Technical Publications

3.2.1 IETM Capability

The contractor shall provide an IETM capability using MIAI AIM unit-level maintenance and a RPSTL for the ABV. Where applicable, troubleshooting data shall be developed for incorporation into the IETM. The IETM will be developed in the same manner as the M1A1 Tank ED IETM, using the US Army and USMC IADS program, and be linked to the fault isolation program of the embedded sidecar application. Final deliverable ED/IETM capability will be developed after testing of initial vehicle set and the production baseline is established. The ED IETM shall be submitted as CDRL A003.

3.2.2 Database Development

The contractor shall develop a database to support a digital change process for technical manuals under the contractor established configuration management process.

3.2.3 Validation and Verification

The contractor shall conduct validation and support Government verification for all technical data.

3.3 Training Support

3.3.1 Develop Operator and Maintainer Plan of Instruction (POI)

The contractor shall develop Maintainer POI and training package for the ED system consisting of:

- Course Outlines
- Lesson Plans
- Student Handbooks
- Practical Exercises (PEs)/Examinations/Course Evaluations

The contractor shall use existing data where possible and shall assist in the conduct of on-site training at the following locations:

- Camp Pendleton, CA
- Camp Lejeune, NC
- Marine Detachment Ft. Knox, KY

Unless otherwise indicated by the Government, the ED Training Package shall be in contractor format and submitted per CDRL A004.

3.4 Test Measurement and Diagnostic Equipment (TMDE)

No new or unique TMDE will be added as part of this task other than the vehicle ED hardware and ED Support Kit.

3.4.1 BIT/FIT Capability

The contractor shall provide a Built-in Test (BIT)/Fault Isolation Test (FIT) capability, IAW the ABV's performance specification, which has a 95% fault isolation goal to an ambiguity of one using the installed ED system.

3.4.2 Identify Residual STE-M1/FVS Requirements

The contractor shall identify STE-M1/FVS test tools and auxiliary equipment for the ABV with embedded diagnostics, e.g., ABV ED Support Kit. The contractor shall also provide options for resolution.

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3.5 Embedded Diagnostics (ED) for ABV

The contractor shall develop embedded diagnostics for the ABV. This effort shall include:

- Identifying Power Requirements
- Identifying Space Claim
- Coordinating with the ABV System Engineer and ANAD
- Make modifications to existing ED hardware or develop new hardware as necessary to meet ABV diagnostics requirements

The contractor shall document and manage ED for the ABV application to include:

- Software Management
- Hardware Management
- Training
- Identifying computer requirements, tools, and hand held TMDE to support ED.

3.5.1 Testability Analysis

The contractor shall perform a testability analysis and assessment for the ABV and document the results in a Testability Analysis and Assessment Report. This report shall be an evolving document coincident with the vehicle development and shall provide an assessment on what resources are available to test the vehicle and to recommend improvements for testability. The report shall be in contractor format and submitted per CDRL A005.

3.5.2 Diagnostic Strategy

The contractor shall develop a scaleable/evolving ED Test Strategy for the ABV based on the testability assessment. This strategy shall provide the capability for diagnostics data access via a Laptop PC, Wearable Computer or PDA. The strategy shall also provide the capabilities for run-time diagnostics (health check), mission recording capabilities and maintenance diagnostics (full diagnostics). The ED strategy shall be IAW the Marine Corps' support structure and level-of-repair policies as defined in the Operational Requirements Document (ORD) for the ABV. The Test Strategy will make maximum use of existing non-developmental hardware and software. The ED strategy shall be documented in the Test Strategy Report (TSR) and submitted per CDRL A006.

3.5.2.1 ABV Health Check

The ABV health check will verify the operational characteristics of all functions that can be verified operational or within tolerance without user interaction. Health check will provide a means for fault identification.

3.5.2.2 ABV Full Diagnostics

The ABV full diagnostics will make use of the user/maintainer to perform certain actions in the vehicle to verify operation and fault isolate failures. Full diagnostics will provide the means for fault isolation.

3.6 Configuration Management (CM)

3.6.1 Support CM Functions

The contractor shall support the following four CM functions through FOC:

- Configuration Identification
- Configuration Change Management
- Configuration Status Accounting

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- Configuration Verification and Audit

3.6.1.1 Configuration Identification

The contractor shall prepare and maintain a Technical Data Package (TDP) to define the product baseline configuration. The TDP shall consist of engineering drawings, drawing trees, parts lists, specifications, specification tree, procedures and processes that are peculiar to the ABV program. The baseline configuration shall meet the requirements in the ABV requirements and specification documents and the Interface Control Drawing (ICD). The ED TDP Parts List shall be submitted per CDRL A007.

Engineering drawings and associated lists shall disclose a design approach suitable to support the manufacture of the contractor's equipment and shall be of sufficient detail and completeness to provide the design needed to produce additional end items for future requirements.

3.6.1.2 Configuration Change Management

The contractor shall maintain control over engineering documentation to the degree necessary to be able to precisely define (by serial/lot number) the configuration of each end item of equipment under its control.

3.6.1.3 Configuration Status Accounting

The contractor shall establish the plans for collecting, storing, and retrieving configuration information. Status records shall be prepared to record all established baselines of formally released data elements and approved changes to these elements and baselines.

3.6.1.4 Configuration Verification and Audit

The contractor shall establish that the performance and functional requirements defined in the configuration documentation have been achieved by the design and that the design has been accurately documented in the configuration documentation.

The Government may audit, review and monitor any or all documentation generated by the contractor at any time during the course of the contract. The contractor shall incorporate the Government's comments resulting from reviews and shall provide evidence of such incorporation thirty (30) days after receipt of the Government's review comments.

3.7 Optional Program Requirements

The requirements listed in the following paragraphs represent options that the Government may chose to exercise. These options will be separately priced when requested by the Government.

3.7.1 Subsystem Testability Analysis Option

The contractor shall perform a testability analysis and assessment for the ABV subsystems and document the results in a Testability Analysis and Assessment Report. This report shall be an evolving document coincident with the vehicle development and shall provide recommendations on vehicle testability improvements. The report shall be in contractor format and submitted per CDRL A008.

3.7.2 Subsystem Diagnostic Strategy Option

The contractor shall develop a scaleable/evolving Test Strategy for the ABV subsystems based on the testability assessment. This strategy shall provide the capability for diagnostics data access via a Laptop PC, Wearable Computer or PDA. The strategy shall also provide the capabilities for run-time diagnostics (health check), mission recording capabilities and maintenance diagnostics (full diagnostics). The ED strategy shall be IAW the Marine Corps' support structure and level-of-repair policies as defined in the

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Operational Requirements Document (ORD) for the ABV. The ED strategy shall be documented in the Test Strategy Report (TSR) and submitted per CDRL A009.

3.7.3 MIAI Chassis TM Data Option

The contractor shall provide additional maintenance data not included in Section 3.2.1 such as PMCS, theory of operation, maintenance allocation chart (MAC) and repair tasks not covered in the IETM.

3.7.4 Incorporation of Subsystem Data Option

The contractor shall incorporate vendor source data covering line replaceable unit (LRU) replacement instructions, troubleshooting and repair parts and special tools list (RPSTL) data into the interactive electronic technical manual (IETM). The following ABV subsystems will be covered:

- Full Width Mine Plow (FWMP)
- Rapid Ordnance Removal System (RORS)
- Surface Mine Plow (SMP)
- Lane Marking System (LMS)
- ABV Turret
- Jettison
- Remote Control
- MICLIC

3.7.5 Subsystem Training Option

The contractor shall develop Maintainer POI and Training Package for the following subsystems:

- FWMP
- RORS
- SMP
- LMS
- ABV Turret
- Jettison
- Remote Control
- MICLIC

The POI for these subsystems shall consist of:

- Course Outlines
- Lesson Plans
- Student Handbooks
- Practical Exercises (PEs)/Examinations/Course Evaluations

The contractor shall use existing data where possible and shall assist in the conduct of on-site training at the following locations:

- Camp Pendleton, CA
- Camp Lejeune, NC
- Marine Detachment Ft. Knox, KY

Unless otherwise indicated by the Government, the Subsystem Training Package shall be in contractor format and submitted per CDRL A010.

3.7.6 Computer Based Training (CBT) Option

The contractor shall provide computer-based training that will address the following capabilities:

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- ED operation and maintenance
- Vehicle Systems operation by crew position
- New Equipment Training (NET)
- Assault Breacher Vehicle Sub-System (created as a training package that can be deployed with a full POI for an institutional training environment and for Instructor and Key Personnel (I&KP)).

Instructional design will use established POI's and previously developed training packages (provided by the government) for the M1 Abrams hull systems and vehicle operator training. New sub-systems will be incorporated into the vehicle training to create a comprehensive and seamless presentation.

3.7.7 Government Furnished Information (GFI) for ABV Subsystems Option

The Government shall provide the contractor with the necessary information to support the ABV subsystem tasks defined in this SOW. Data to be provided includes but is not limited to ICDs, schematics, product specifications, TM's, LSA, provisioning, RAM Analysis, source data, etc. Data of particular interest will be the ICDs, schematics and product specifications for the ABV turret based systems.

Video that is to be used in IETM development shall be provided in a format that is compatible with IADS.

4 GOVERNMENT FURNISHED PROPERTY

4.1 Government Furnished Equipment (GFE)

The Government shall make available to the contractor an integration vehicle and other vehicle specific equipment required for integration tasks. The contractor shall coordinate vehicle availability requirements with the Government. It is estimated that two trips to either Quantico or Aberdeen will be required to support the vehicle integration tasks

The Government shall provide all ED auxiliary hardware, i.e., the ABV ED Support Kit and the Panasonic Toughbook PC.

5 DELIVERABLES

The contractor shall provide one (1) set of ED prototype hardware and three (3) sets of ED limited rate initial production (LRIP) hardware. Delivery of the ED hardware shall be in accordance with the USMC ABV Master Program Schedule.

The Contract Data Requirements List (CDRL) associated with this SOW is shown in Exhibit A. The Government will approve or disapprove all CDRLs within thirty (30) days of submission.

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EXHIBIT A. CONTRACT DATA REQUIREMENTS LIST

Seq. No.	Format	Title/Subject	SOW ¶	Submission Form	No. Copies	Submission Due Date	Frequency	Gov't Response
A001	Contractor's	Monthly Status Report	3.1.1	Electronically	1	7 DAEOM	Monthly	Accept
A002	MS Project	ABV Summary Level Schedule (Macro)	3.1.2	Electronically	1	7 DAC	Initial/Update As Required	Approval
A003	Contractor's	ED IETM and Diagnostics Software	3.2.1	CD ROM	1	TBD	Initial/Update As Required	Approval
A004	Contractor's	ED Training Package	3.3.1	Electronically	1	TBD	Initial/Update As Required	Approval
A005	Contractor's	Testability Analysis and Assessment Report	3.5.1	Electronically	1	TBD	Initial/Update As Required	Approval
A006	Contractor's	Test Strategy Report (TSR)	3.5.2	Electronically	1	TBD	Initial/Update As Required	Approval
A007	Contractor's	ED TDP Parts List	3.7.4	Electronically	1	TBD	Initial/Update As Required	Approval
A008	Contractor's	Subsystem Testability Analysis and Assessment Report Option	3.7.4	Electronically	1	TBD	Initial/Update As Required	Approval
A009	Contractor's	Subsystem Test Strategy Report (TSR) Option	3.7.5	Electronically	1	TBD	Initial/Update As Required	Approval
A010	Contractor's	Subsystem Training Package Option	3.7.3	Electronically	1	TBD	Initial/Update As Required	Approval

Abbreviations: DAEOM Days After End of Month
DAC Days After Contract Award



September 29, 2003

SMALL BUSINESS

SUBCONTRACTING PLAN

CONTRACTOR

PEI ELECTRONICS, INC.
110 Wynn Drive
Post Office Box 1929
Huntsville, AL 35807-0929

SOLICITATION OR CONTRACT NUMBER

RFP: Assault Breacher Vehicle
3CM16

ITEM/SERVICE

Assault Breacher Vehicle

This Plan, together with any attachments, is hereby submitted as a Small Business Subcontracting Plan to satisfy the applicable requirements of FAR 52.219-9 Small Business Subcontracting Plan (JAN 2002), and DFARS 252.219-7003 (APR 1996) Small, Small Disadvantaged and Woman-Owned Small Business Subcontracting Plan requirements.

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I. Introduction

This Small Business Subcontracting Plan has been developed in accordance with Public Law 95-507, the Federal Acquisition Regulation (FAR) 52.219-9 Small Business Subcontracting Plan (JAN 2002), and the Defense Federal Acquisition Regulation Supplement (DFARS) 252.219-7003, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan requirements.

II. PEI COMPANY-WIDE POLICY

PEI Electronics, Inc. (PEI) maintains an aggressive corporate policy and a continuing program to promote subcontracting to Small Business. This activity is based on the documented policies within PEI's Purchasing Procedures Manual. A specific section within the manual entitled "Utilization of Small Business Concerns" defines the duties and responsibilities of procurement personnel as they relate to PEI's policy of procuring parts and services from such businesses.

III. SUBCONTRACTING GOAL STATEMENT

To achieve the goal of actively promoting subcontracting to small business concerns, PEI reviews each item on the bill of material to decide which items can be subcontracted to small business concerns. The decision is based upon a review of internal source data and past procurement history on same or similar items, as well as a review of various small and small disadvantaged business directories including Small Business Administration (Pro-NET).

IV. PLAN ADMINISTRATOR AND DUTIES

B. V. Little, Manager of Purchasing, (256) 895-2009, is the Company's overall Small Business Subcontract Plan Administrator and has the responsibility for assuring compliance with all subcontract plans. As such, he has the following specific duties:

- (A) Develop and maintain bidders' lists of small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns.
- (B) Assure inclusion of small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns in all solicitations for products or services, which they are capable of providing.
- (C) Review solicitations to remove statements, clauses, etc., which may tend to restrict or prohibit small business, veteran-owned small business, service-disabled small business, HUBZone small business, small disadvantaged business, and women owned small business participation.

- (D) Ensure periodic rotation of potential subcontractors on bidders' lists.
- (E) Ensure the establishment and maintenance of records of solicitations and subcontract award activity.
- (F) Monitor attainment of proposed goals.
- (G) Prepare and submit periodic subcontracting reports required.
- (H) Serves as a member of the committee to identify and assure consideration is given to small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and woman owned small business concerns in all make-or-buy decisions.
- (I) Assure that full consideration is given by Engineering to small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns in their design of material for the acquisition phase and production hardware requirements.
- (J) Arrange meetings between Engineering and small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns to discuss design requirements during the contract definition phase.
- (K) Work with procurement personnel to assure they are complying with the PEI Subcontracting Small Business Program procedures, and monitor their performance against same.
- (L) Coordinate PEI's small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and woman owned small business program activity and performance on a regular basis with reports to the CFO and President of PEI Electronics, Inc.
- (M) Review and amend PEI's policies and procedures as necessary for small business, veteran-owned small business, service-disabled small business, HUBZone small business, small disadvantaged business, and women owned small business concerns' opportunities in accordance with Government regulations.
- (N) Maintain up-to-date directories listing capabilities of small business, veteran-owned small business, service-disabled small business, HUBZone small business, small disadvantaged business, and women owned small business concerns; coordinate DCMC Small Business Office and with the Small Business Administration (SBA) to identify small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small

disadvantaged business, and women owned small business concerns; review potential suppliers; and exchange information with related industries on qualified potential bidders.

- (O) Train procurement personnel in the proper use of in-house and outside procurement directories and the SBA Procurement Marketing and Access Network (Pro-Net) in order to identify new sources.
- (P) Familiarize procurement personnel with the procedure to assist small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns in becoming a PEI-approved supplier.
- (Q) Assure that the Clause entitled "Utilization of Small Business Concerns, FAR 52.219-8" is included in all subcontracts that offer further subcontracting opportunities, and that the subcontractors (except small business concerns) that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of FAR 52.219-9, Small Business Subcontracting Plan.
- (R) Ensure the Small Business Subcontracting Semi-annual Reports are generated and submitted timely.
- (S) Discuss PEI's existing and future business requirements with small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns.
- (T) Attend meetings, conferences, trade fairs, and other community activities for the purpose of increasing the participation of small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns in PEI's Government and commercial programs.

V. EQUITABLE OPPORTUNITY FOR SMALL BUSINESS, VETERAN-OWNED SMALL BUSINESS, SERVICE-DISABLED SMALL BUSINESS, HUBZONE SMALL BUSINESS, SMALL DISADVANTAGE BUSINESS AND WOMEN-OWNED SMALL BUSINESS CONCERNS

The following efforts will be taken to assure that small business, veteran-owned small business, service-disabled small business, HUBZone small business, small disadvantaged business, and women owned small business concerns will have an equitable opportunity to compete for subcontracts:

- (A) Outreach efforts will be made as follows:

- (1) Attend small business, veteran-owned small business, service-disabled small business, HUBZone small business, small disadvantaged business, and women owned small business procurement conferences and trade fairs.
 - (2) Respond to oral and written contracts made by small business, veteran-owned small business, service-disabled small business, HUBZone small business, small disadvantaged business, and women owned small business concerns to determine if they have a product or capability that can be used by PEI.
 - (3) Buyers are informed when new small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns are added to PEI's approved suppliers list.
 - (4) Offer technical, managerial, and other assistance as may be necessary to assist small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns in becoming approved suppliers.
 - (5) Maintain contacts with small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business trade associations.
- (B) The following internal efforts will be made to guide and encourage buyers.
- (1) Training programs are conducted to assure buyers are familiar with PEI's Subcontracting Small Business Program.
 - (2) Meetings are held with buyers on a regular basis to review their performance in soliciting and placing orders with small business, veteran-owned small business, service-disabled veteran owned, HUBZone small business, small disadvantaged business, and women owned small business concerns.
 - (3) Buyers are informed when new small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns are added to our approved suppliers list.
 - (4) Small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns source lists, guides,

and other data identifying small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns will be maintained and utilized by buyers in soliciting subcontracts.

VI. PLAN IMPLEMENTATION CONSISTENT WITH EFFICIENT CONTRACT PERFORMANCE

In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor will perform the following functions:

- (A) Assist small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owned small business, service-disabled small business, HUBZone small business, small disadvantaged business, and women owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.
- (B) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns in all "make-or-buy" decisions.
- (C) Counsel and discuss subcontracting with representatives of small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business firms.
- (D) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and woman owned small business for the purpose of obtaining a subcontract that is to be part of a goal contained in the Contractor's subcontracting plan.

VII. FLOWDOWN CLAUSES

The contractor agrees that the clause entitle "Utilization of Small Business Concerns, FAR 52.219-8" will be included in all subcontracts which offer further subcontracting opportunities; and all subcontractors, except small business concerns, who received

subcontracts in excess of \$500,000 (\$1,000,000 for the construction of any public facility) will be required to adopt and comply with a subcontracting plan similar to this one. Such plans will be reviewed by comparing them with the provisions of the Federal Acquisition Regulation which implements Public Law 95-507, and assuring that all minimum requirements of an acceptable subcontracting plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business subcontractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to subcontractors' facilities to review applicable records and subcontracting program progress.

VIII. ASSURANCE TO COOPERATE IN STUDIES AND SURVEYS AND TO SUBMIT REPORTS

The contractor agrees to submit such periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the SBA in order to determine the extent of compliance by the contractor with the subcontracting plan and with the clause entitled "Utilization of Small Business Concerns" contained in the contract. The regular reports required to be submitted are SF-294, Subcontracting Report for Individual Contracts, and SF-295, Summary Subcontract Report; and the contractor will ensure that subcontractors with plans agree to submit these same reports.

IX. RECORDS TO BE MAINTAINED

The contractor agrees that he will maintain at least the following types of records to document compliance with this subcontracting plan:

- (A) Small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns source lists, guides, and other data identifying small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business concerns.
- (B) Names of organizations contacted for small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women owned small business sources.
- (C) On a contract-by-contract basis, records on all subcontract solicitations over \$100,000 indicating on each solicitation:
 - (1) Whether small business concerns were solicited, and if not, why not;

- (2) Whether veteran-owned small business concerns were solicited, and if not, why not;
 - (3) Whether service-disabled veteran-owned small business concerns were solicited, and if not, why not;
 - (4) Whether HUBZone small business concerns were solicited, and if not, why not;
 - (3) Whether small disadvantaged business concerns were solicited, and if not, why not;
 - (4) Whether women-owned small business concerns were solicited, if not, why not; and
 - (5) Reasons for the failure of solicited small business concerns to receive the subcontract award.
- (D) Records to support other outreach efforts: contacts with Minority and Small Business Trade Associations, Business Development Organizations, and attendance at small business procurement conferences and trade fairs.
- (E) Records to support internal activities in the guidance and encouragement of buyers: buyer workshops, seminars, training programs, and monitoring activities to evaluate compliance with the Small Business Program.
- (F) The contractor will also maintain any other records as may be deemed necessary by the contracting agency or the SBA.

SUBCONTRACTING GOALS

SOLICITATION OR CONTRACT NUMBER: RFP: Assault Breacher Vehicle, 3CM16

ITEM/SERVICE: Assault Breacher Vehicle

CONTRACTOR: PEI Electronics, Inc.
110 Wynn Drive
Post Office Box 1929
Huntsville, AL 35807-0929

(A) The following dollar values and percentage goals are applicable to the contract cited above or to the contract awarded as the result of the solicitation cited.

1) Total Contract Award		\$1,335,298
2) Total Estimated Dollar Value of all Planned Subcontracting		\$116,142
3) Total Dollars and Percentages to be Subcontracted to Small Business Concerns	\$62,368	53.7%
4) Total Dollars and Percentages to be Subcontracted to Veteran-Owned Small Business Concerns	\$2,671	2.3%
5) Total Dollars and Percentages to be Subcontracted to HUBZone Small Business Concerns	\$580	.5%
6) Total Dollars and Percentages to be Subcontracted to Small Disadvantaged Business Concerns	\$13,821	11.9%
(a) Historically Black Colleges and Universities (HBCU's)	\$0	0%
(b) Minority Institutions (MI's)	\$0	0%
NOTE: (a) AND (b) ARE SUBSETS OF (6)		
(7) Total Dollars and Percentages to Subcontracted to Woman Owned Small Business Concerns	\$8,827	7.6%
(8) Service-Disabled Veteran-Owned Small Business	\$0.0	0%

SUBCONTRACTING GOALS (continued)

- (B) Subject award is a manufacturing effort and there is no subcontracting opportunities for HBCU's/MI's.
- (C) PEI Electronics, Inc.'s accounting system is not designed for allocation of indirect costs to individual contracts. Indirect subcontract statistics are reported on the semi-annual SF-295 Summary Subcontract Report.

PRINCIPAL TYPES OF SUPPLIES AND SERVICES TO BE SUBCONTRACTED

ITEM	SMALL BUSINESS CONCERNS	VETERAN- OWNED SMALL BUSINESS CONCERNS	HUBZone SMALL BUSINESS CONCERNS	SMALL DIS- ADVANTAGED BUSINESS CONCERNS	WOMEN- OWNED SMALL BUSINESS CONCERNS
ACTIVE COMPONENTS					
PASSIVE COMPONENTS	X				
INTERCONNECT DEVICES	X				
FASTENERS	X	X			
ELECTRO-MECHANICAL	X				
MACHINED ITEMS	X		X		X
SHEET METAL ITEMS	X				
SWITCHES					
LABEL/DECALS	X				
ADHESIVES/ COMPOUNDS	X				
WIRE/CABLE	X				
PRINTED CIRCUIT BOARDS	X			X	
CASTING					
MAGNETICS					X
POWER SUPPLIES					